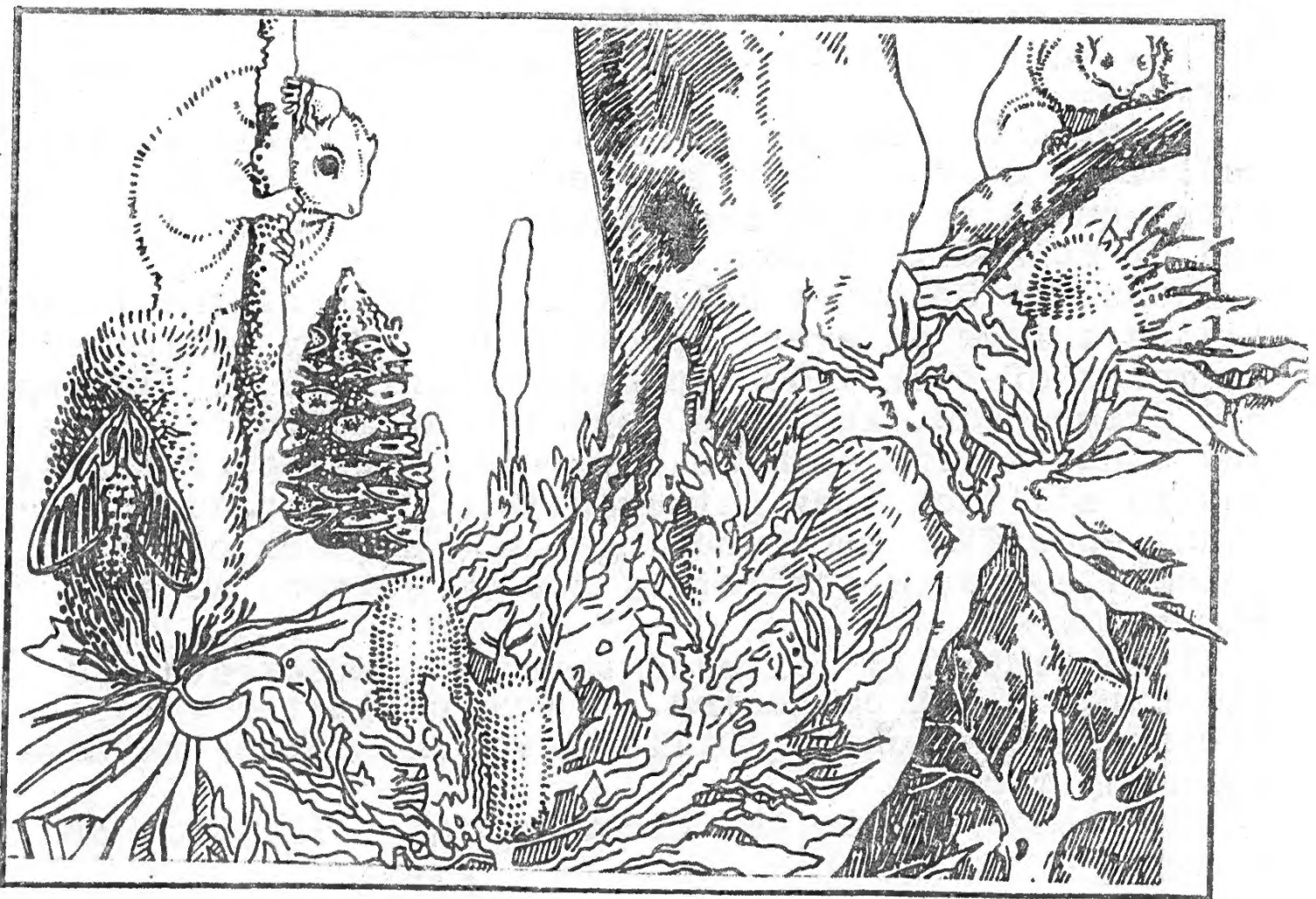


*Field Naturalists
Club of Ballarat*
Incorporated.

MAY 1990

EXCURSION - NEWS SHEET

- Meeting May 4 Mr A. Cavanagh - Banksias
- Meeting June 1 Mr R. C. Reichelt - Flora and Fauna of the Little Desert
- Excursion May 5 Brisbane Ranges, Afternoon and evening
- Excursion June 3 Tullaroop Creek, Afternoon only.



President: Mr K Hammond Ph.053 394534
Vice Pres: Miss H Burgess 312210
Secretary: Mr J Gregurke 394993
Treasurer: Mrs F Williamson 327631
Editor: Mr L Fink 052 861319

Meetings as specified are held at the School of Mines and Industries, Lydlard Street Sth., Art Building, commencing at 7.30 p.m.
EXCURSIONS, AS SPECIFIED, COMMENCE FROM CROCKERS, cnr. STURT AND ARMSTRONG STS. BALLARAT, at 9.30 a.m. for FULL DAY OUTINGS OR AT 1.30 p.m. for HALF DAY.

JOSEPH BANKS Botanist.

Joseph Banks was born in 1743, the only son of a wealthy land-owning family. From an early age his declared passion was natural history, and in particular, botany. Shortly after inheriting his family's fortune in the early 1760s, he chose to pursue this passion to the full.

Before the Endeavour was due to sail, permission was granted to Joseph Banks, a fellow of the Royal Society and a passionate botanist, to bring aboard a party of Naturalists at his own expense, 'for the advancement of useful knowledge.' Cook had to find room for this party of nine, even giving up his great cabin, the only suitable space to work in.

Lieut. Hicks sighted the first of the Eastern Coast at a point that still bears his name. Accompanying Banks were Dr Daniel Solander, a Swedish Naturalist, Sydney Parkinson, a botanical artist, Alexander Buchan, a painter of Landscapes and portraits; Herman Sporing a Swedish watchmaker and draughtsman with training in surgery, and four servants.

On April 28 Cook was in Botany Bay, he originally called it Stingray Bay but renamed it, after the great quantity of native plants collected by Banks and Dr Solander, Botany Bay.

Banks and Solander collected specimens of the living things at every opportunity. They collected examples of over 1,000 species of animals, including 370 arthropods, about 500 species of molluscs, fish and other marine animals, over 100 species of birds, and in addition they gathered 30,000 individual plant specimens representing 3,600 species of which 1,400 were completely new to science at that time.

It is generally believed that *Banksia serrata* was the first plant collected, others collected were *Hibiscus meraukensis*, *Dillenia alata*, *Correa reflexa* and many more.

Acknowledgement to the Bicentennial collection of stamps.

CONCERNING CONVOYS

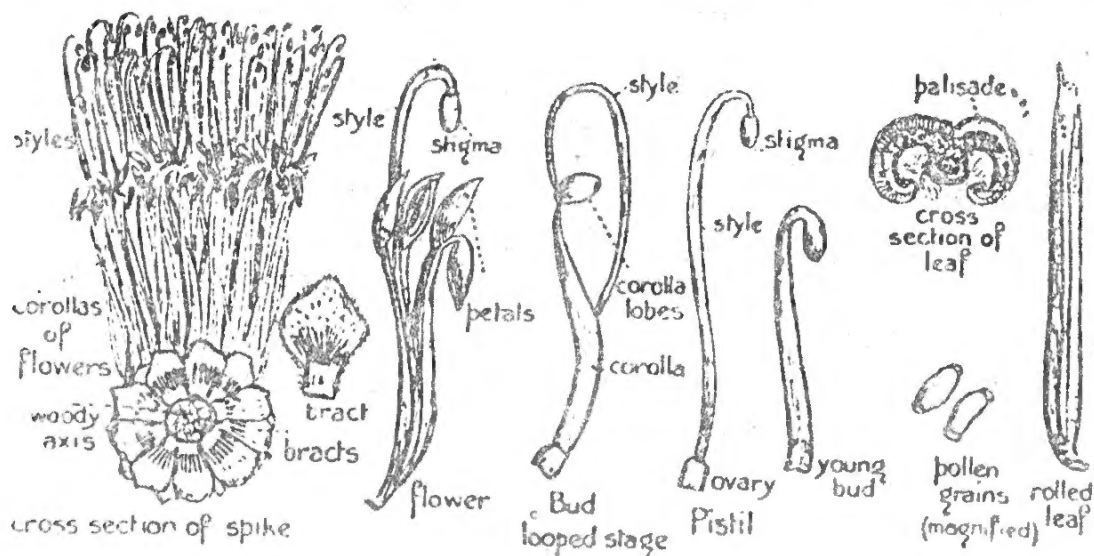
The following policy was adopted for Club use some years ago. Perhaps a refresher would not go astray !

When travelling in convoy drivers are asked to keep a safe distance between cars, and to keep the car ahead and the car behind in sight. If the car behind stops you are asked to stop also. This will bring the convoy to a halt. A driver may be in difficulties, or may have been delayed at or missed a turning point, or may have sighted something of special interest.

LAWN & GARDEN WEEDS Booklet

The Castlemaine F N C has produced a sixteen page booklet describing some common garden, lawn, and nature strip weeds of that area. No doubt, these apply to Ballarat district also and members may find the booklet useful for identifying weeds. A copy is available from the Club library.

BANKSIA Family - Proteaceae
parts of the flower-ref. Brewster and
le Plastrier, Botany for Australian Students.



Banksia spinulosa (Honey Suckle)

The Natural History of the Mt. Gambier Area.

Speaker Mr Brett Mitchell.

Brett stated that he was not an expert, but was fascinated by the Mt. Gambier area, the water and plant life is unique, it is a scuba divers and photographers dream, Brett is both of these.

The area is a limestone plain covering some 6,000 sq. kilometres. The limestone is quarried and used extensively for building stone.

About 30,000,000 years ago this area was an ocean it was a tropical area then and the coral like animals that made up the limestone were plentiful, the limestone is very thick.

The Mt Gambier area was lifted up and dried out.

Limestone does not support water, the water in this area comes up from water trapped by the limestone

The Blue is a result of the Mt. Gambier limestone dissolving in Calcium Carbonate and reflecting blue, the temperature changes in summer and is just warm enough to dissolve the limestone.

Volcanoes resulted in the blue lakes being formed 4,000 years ago when these volcanoes were active, Aborigines were well entrenched in the Australian scene.

It is not a very stable area, water dissolves the limestone from underneath and then it collapses forming sink holes. Water passing through the limestone forms caves, and water again causes the very beautiful stalagmites (ceiling) and stalagmites (floor), most caves become home to Bats, the water is colder than most water.

Plants ability to take in carbon dioxide and produce oxygen is well shown, here you can see oxygen being released, the water literally fizzes, but is also still and many algae grow.

Some of the plants growing were nasturtiums because the water is so still and clear, they grow and prosper, every six hours the water is flushed out. The second pond is full of delicate algae

growth, there is also southern pigmy perch living on and in the algae, caddis fly larvae live in their myriads before they hatch, they have hydrophillic feet and can take off from the water.

Pond three is the deepest with a cave,

Piccaninni ponds contain a very famous chasm, the first is the turtle pond with it's curtain of reeds then to the chasm, the first thirty feet is covered with algae, then to the cave called the Cathedral.

Apart from the plant life in these ponds there is a host of small animals and insects live and thrive here. Short finned eels, they hatch out and travel to the Coral Sea then return. Fresh water crayfish with flat worms attached to them who probably feed with the crays, crayfish moult and absorb a lot of water before growing a new shell. River blackfish are another along with a flat-headed fish called a tupong. Galaxids, native trout about four inches long and a caterpillar like animal that eventually grows into a pupae then into an adult, they build a leaf house to protect them from the caddis fly larvae and other predators

There are snails, fresh water sponges, hydroids with stinging hairs to catch food, this is a very small animal, there is also a red backed spider mite

In the limestone are many fossils, one of them a sea urchin or sand dollar is still found today in Port Phillip Bay.

L.F.

Field Reports: April Meeting

K. McDonnell - Male swan removing old leaves to allow cygnets to feed on young shoots at Lake Daylesford. At Invermay one group of White-winged Choughs repulsed an attack from a second group, but then the second group attacked in an organised manner and were successful in taking over the area.

L. Fink - Black-faced Cuckoo Shrikes entering garden were attacked and evicted by resident Honeyeaters.

H. Burgess - Common Bronzewing in garden at Black Hill; first since 1978.

G. Binns - no Silver Gulls or Musk Duck at Winter Swamp; but many Shoveller, Black Duck and Grebe.

M. Tonkin - King Parrots on bird table at Anglesea. Many birds came to refilled bird bath.

K. Hammond - Spine-tailed Swifts feeding at roof top level over Curtis Street carpark.

A. McErlain - Nankeen Night-heron roosting at Learmonth.

FOR YOUR DIARY ...

- May 5 Excursion to the Brisbane Ranges to observe autumn flora in the afternoon, (and fauna too!), have tea around a campfire, and in the evening search for nocturnal animals by spotlight. Depart Crockers Corner at 1.30 pm.
- July 4, 5 The Otways - symposium at Deakin University, Geelong. Brochure available.
- October 13-27 Kingston Tours Coorong and Kangaroo Island Safari. Brochure available.
- May 5 Excursion to Brisbane Ranges
- May 26 27 S.G.A.P. weekend - Dinner, Public Lecture and Bus Tour
- May 12 9-30 at Civic Hall to plant Anchor Plants
- May 17 8 p.m. Committee Meeting at 130 Moola St Helen Burgess

This picture illustrates a number of points about good farm forestry. It shows poplars (leafless in winter) holding the soil in a creekbed. Their high pruning produces quality timber for sale at a later stage - and provides moving shade in summer that prevents disease-spreading dung buildups from sheep or cattle "camps". The woodlot pines in the background are another proposition, as are mixtures of pines, eucalypts and poplars - or the growing of fodder trees for livestock.



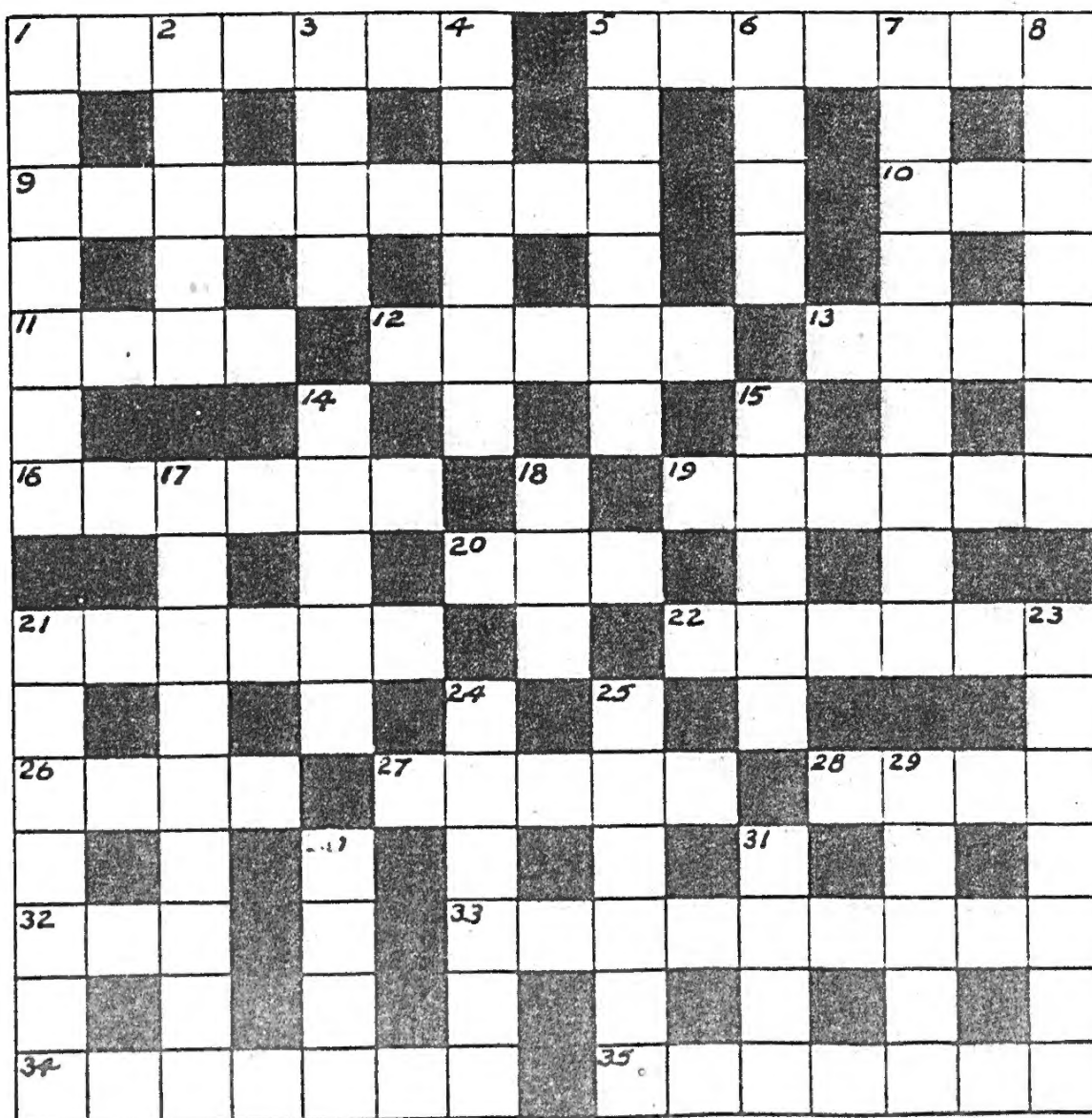
ACROSS

1 Ivy or Tree—— (7) 5 Fish or turtle? (7) 9 Herb (9) 10 Mythical bird (3) 11 Molluscs do with their operculum (4) 12 Indian bird (5) 13 Giant (4) 16 Carduelis spinus (6) 19 Ungulate mammals of tropical America (6)* 21 Snee, —— Duck (6) 22 Water birds (6) 26 Small whirlpool (4) 27 Steep hill face (5) 28 To neuter (4) 32 Extinct N.Z. bird (3) 33 Genus Acanthiza (9) 34 Ship; channel clearer (7) 35 Distillated extract (7)

DOWN

1 Fam. Cuculidae (7) 2 Eagle's nest (5) 3 Fruit (4) 4 Perca fluviatilis (exotic fish) (6) 5 Brook (6) 7 A falcon (9) 8 Plant and caterpillar (that hurtle through the air?) (6) 14 Piebald horse (5) 15 Cacatua roseicapella (5) 17 Chestnut breasted male bird (9) 18 Insect (3) 21 Plants are (stopped?) (7) 23 Azure (3,4) 24 Duck of N.Hemisphere (6) 25 It may be Olive-backed or yellow (Golden in U.S.A.) (6) 29 Antarctic or Fairy? (5) 30 Amphibian (4) 31 Red, Drivers, Soldier or Honey? (4)

*20 Ac. Young animal.



BOTANICAL NOTES

Let us compare two families !

PORTULACACEAE

(Purslanes)

Mainly native to America.
Plants often fleshy and able to survive in dry areas.

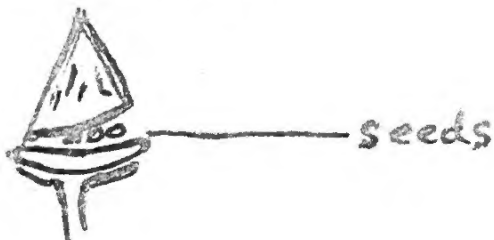
Near Ballarat :- Calandrina
- 2 species that were called " Purslanes " but now Para-keelyas, and Portulaca (common purslane)

Plants are usually succulent annuals or perennials, prostrate and the leaves are sessile .

Leaves usually entire.

Common Purslane has yellow flowers and 2 sepals. Calandrina has white, pink or purple flowers.

Fruit is a capsule which contains many seeds.



capsule - dry and dehiscent

RANUNCULACEAE

(Buttercups)

Many garden plants e.g. buttercups, larkspur, clematis, anemone.

Clematis and several species of Ranunculus (Buttercups)

Usually perennials, often in wet places (name comes from " rana " Latin for "frog ") leaves spirally arranged, often with basal rosette, often lobed.

Flowers are solitary and have 5 sepals. The style persists and forms a glabrous beak on the fruit = an achene.

Some of these may be poisonous to cattle when fresh.



achene - does not dehisce - one seed.

HH